

Commentary on: “Atraumatic Sacral Fracture in Late Pregnancy: A Case Report”

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The authors report on an important differential diagnosis of back pain in a pregnant woman caused by an atraumatic insufficiency sacral fracture. This diagnosis is a rare entity in pregnant patients and may often be overlooked due to nescience by the treating physicians. The authors discuss the diagnostic and treatment options in undisplaced sacral fractures and their successful natural treatment result.

Although this patient report is not the third case of an atraumatic sacral fracture during pregnancy in the literature,^{1,2} and despite a considerable number of other reports of pregnancy-related sacral fractures in the immediate postpartum period, it is nevertheless important to present such rare medical entities occurring during and shortly after pregnancy, so that these patients are not inadvertently treated incorrectly.

The authors refer to the rare possibility of pregnancy-related osteoporosis and the altered posture and load-bearing capacity of the posterior pelvic ring during pregnancy as preconditions for atraumatic sacral fracture. The pathomechanism for prepartum sacral fracture may also be differentiated into (1) insufficiency fractures due to transient osteoporosis of the sacrum associated with pregnancy or (2) fatigue fractures due to unaccustomed stress related to rapid and excessive weight gain in the last trimester of the pregnancy.³ Bone mineral density measurement might help in this differentiation.

Treatment options for atraumatic sacral fractures especially in a pregnant patient are very limited, and cases are typically handled nonoperatively during pregnancy as described; however, the importance of a cesarean section for delivery should again be highlighted to avoid intrapartum worsening of the fracture.^{4,5} Independently of that, most of the time surgical stabilization of an atraumatic insufficiency fracture seems to be unnecessary in the postpartum period. Surgical intervention would only be indicated in lasting instability of the pelvic ring or in the presence of progressive deformity and certainly in the case of sacral nerve dysfunction due to fracture impingement.

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